BEFORE THE DEPARTMENT OF
NATURAL RESOURCES AND CONSERVATION
OF THE STATE OF MONTANA

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APPLICATION TO CHANGE WATER RIGHT NO. 76H 30155255 BY MISSOULA COUNTY, FOR MISSOULA COUNTY RSID #901	**PRELIMINARY DETERMINATION TO GRANT CHANGE**

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On March 28, 2022, Missoula County RSID #901 (Applicant) submitted Application to Change Water Right No. 76H 30155255 to change Groundwater Certificate No. 76H 29923-00, to the Missoula Regional Office of the Department of Natural Resources and Conservation (Department or DNRC). The Department published receipt of the Application on its website on April 4, 2022. The Application was determined to be correct and complete on September 20, 2022. An Environmental Assessment for this Application was completed on January 11, 2023.

INFORMATION

The Department considered the following information submitted by the Applicant, which is contained in the administrative record.

Application as filed:

- Application to Change Water Right, Form 606
- Criteria Supplement to Form 606
    - 2020 water production year records
    - Water Rights Needs Assessment for Lolo RSID 901 by HDR Engineering Inc. dated May 2019
    - Motion to amend Statement of Claim 76H 1196-00
        - Stipulation for Motion to Amend
        - Water Court Master's Report
        - Water Court Order Adopting Master's Report
- Maps:
    - Aerial photo showing historical and proposed places of use (undated)
    - Aerial photo showing City of Lolo water distribution model (undated)
    - Wastewater Treatment Plant Schematic
        - Lolo Sewer Collection map – East side

        - Lolo Sewer Collection map – West side
    - Lolo Wastewater Treatment Plant Open Water Surfaces

Information within the Department's Possession/Knowledge

- DNRC surface water and groundwater right records
- Application materials for pending Change Application Nos. 76H 30153269, 76H 30155253 & 76H 30155256
- Department Technical Report dated September 20, 2022
- June 1988, Final Engineering Report for Water Systems Analysis prepared for Missoula County RSID 901.
- October 1992, Water – Sewer System Analysis Report for Lolo, Mt
- DNRC Environmental Assessment, dated January 11, 2023

The Department has fully reviewed and considered the evidence and argument submitted in this Application and preliminarily determines the following pursuant to the Montana Water Use Act (Title 85, chapter 2, part 3, part 4, MCA).

WATER RIGHT TO BE CHANGED

FINDINGS OF FACT

1. The Applicant seeks to change the place of use of Groundwater Certificate (Certificate) No. 76H 29923-00. The certificate was issued for 75 gallons per minute (GPM) flow rate and 61 acre-feet (AF) of diverted volume from one groundwater well. The purpose is municipal with a priority date of March 10, 1980. The period of use and period of diversion is January 1 through December 31 annually. Change Authorization 76H-119599, issued by the Department on December 9, 1991, included Permit 76H 27837-00, Claim 76H 1196-00, and Certificate 76H 29923-00. The change authorization allowed Lolo to add a 500,000 gallon (1.5 AF-capacity), above ground, metal storage tank to the above listed water rights. The active changed elements of Certificate 76H 29923-00 are summarized in Table 1.

Table 1: Groundwater Certificate proposed for change

WR Number	Flow Rate (GPM)	Volume (AF)	Purpose	Period of Use	Place of Use	Points of Diversion	Place of Storage	Priority Date
76H 29923-00	75 GPM	61 AF	Municipal	01/01 to 12/31	Sec. 25, 26, 27, 34, 35 T12N, R20W	NESESW Sec 26, T12N, R20W Emergency Well	NWNENE Sec. 34, T12N R20W (1.5 AF capacity)	03/10/1980

2. The point of diversion is a well located in the NESESW of Section 26, T12N, R20W, known as the Emergency/Supplemental Well. The originally issued place of use consists of the Missoula County Rural Special Improvement Maintenance District No. 901 boundaries, as of March 1980. This area is located in the SWSW of Section 25, Section 26, SE of Section 27, N2 of Section 34 and the NW of Section 35, all in T12N, R20W, Missoula County. This is the same point of diversion and place of use as what was issued in 1980. The place of use is approximately 12 miles south of Missoula and is referred to as the Town of Lolo (Lolo).

3. Certificate 76H 29923-00 is supplemental with four other water rights serving the municipal water system because they are manifold into a common distribution system and have partially overlapped places of use. Three of the four other water rights associated with the municipal water system are currently being changed in separate change applications as required under the provisions of ARM 36.12.1901(7), because upon completion of the proposed change in water use these water rights will have the same place of use and purpose but different points of diversion (different wells). The place of use for Statement of Claim 76H 1196-00 is being concurrently adjudicated by the Montana Water Court. The Applicant is working with the Montana Water Court on Claim 76H 1196-00 to decree the place of use to match the place of use proposed in this change application per Lolo's Water Rights Needs Assessment report by HDR Engineering Inc. dated May 2019. The four supplemental water rights and their corresponding change application numbers are listed below.

Table 2: Supplemental Water Rights

Water Right	Change Application submitted	Priority Date	Point of Diversion	Type
76H 1196-00	Motion to Amend filed with the Montana Water Court	7/24/1969	Well No. 1	Statement of Claim
76H 80142-00	76H 30155253	1/3/1992	Well Nos. 1, 2 and Emergency Well	Provisional Permit
76H 95036-00	76H 30155256	7/27/1995	Well No. 3	Provisional Permit
76H-27837-00	76H - 30153269	3/10/1980	Well No. 2	Provisional Permit

CHANGE PROPOSAL

FINDINGS OF FACT

4. The Applicant proposes to change the place of use for Certificate 76H 29923-00 and all of the other water rights serving the Lolo municipal water system and create a homogenous service area. The homogenous service area is proposed to accommodate the anticipated future municipal growth through planning year 2070, as projected in the Water Rights Needs Assessment for Lolo RSID 901 by HDR Engineering Inc. dated May 2019.

5. Lolo is currently served by three large capacity primary wells: Well No. 1 (76H 1196-00), Well No. 2 (76H 27837-00), and Well No. 3 (76H 95036-00); and a fourth small capacity Emergency Well (76H 29923-00). The fifth water right is Permit 76H 80142-00 which allows the Applicant to divert 74 AF of additional volume from the Emergency Well and Well Nos. 1 & 2. Currently, each water right filed on Lolo's wells has a slightly different and distinct place of use. The existing place of use for the certificate being changed comprises an area that is approximately 2,200 acres within Sections 26, 27, 34 and 35, all in T12N, R20W, Missoula County. The proposed place of use comprises an area approximately 7,520 acres in size, within the sections shown in Table 3 below.

Table 3 – Legal Land Description of proposed Place of Use

	Section	**Township**	**Range**
ALL	22	12 N	20 W
SW ¼	23	12 N	20 W
W ½	25	12 N	20 W
ALL	26	12 N	20 W
ALL	27	12 N	20 W
S ½	32	12 N	20 W
ALL	33	12 N	20 W
ALL	34	12 N	20 W
ALL	35	12 N	20 W
W ½	36	12 N	20 W
W ½	01	11 N	20 W
ALL	02	11 N	20 W
ALL	03	11 N	20 W
ALL	04	11 N	20 W
N ½	05	11 N	20 W

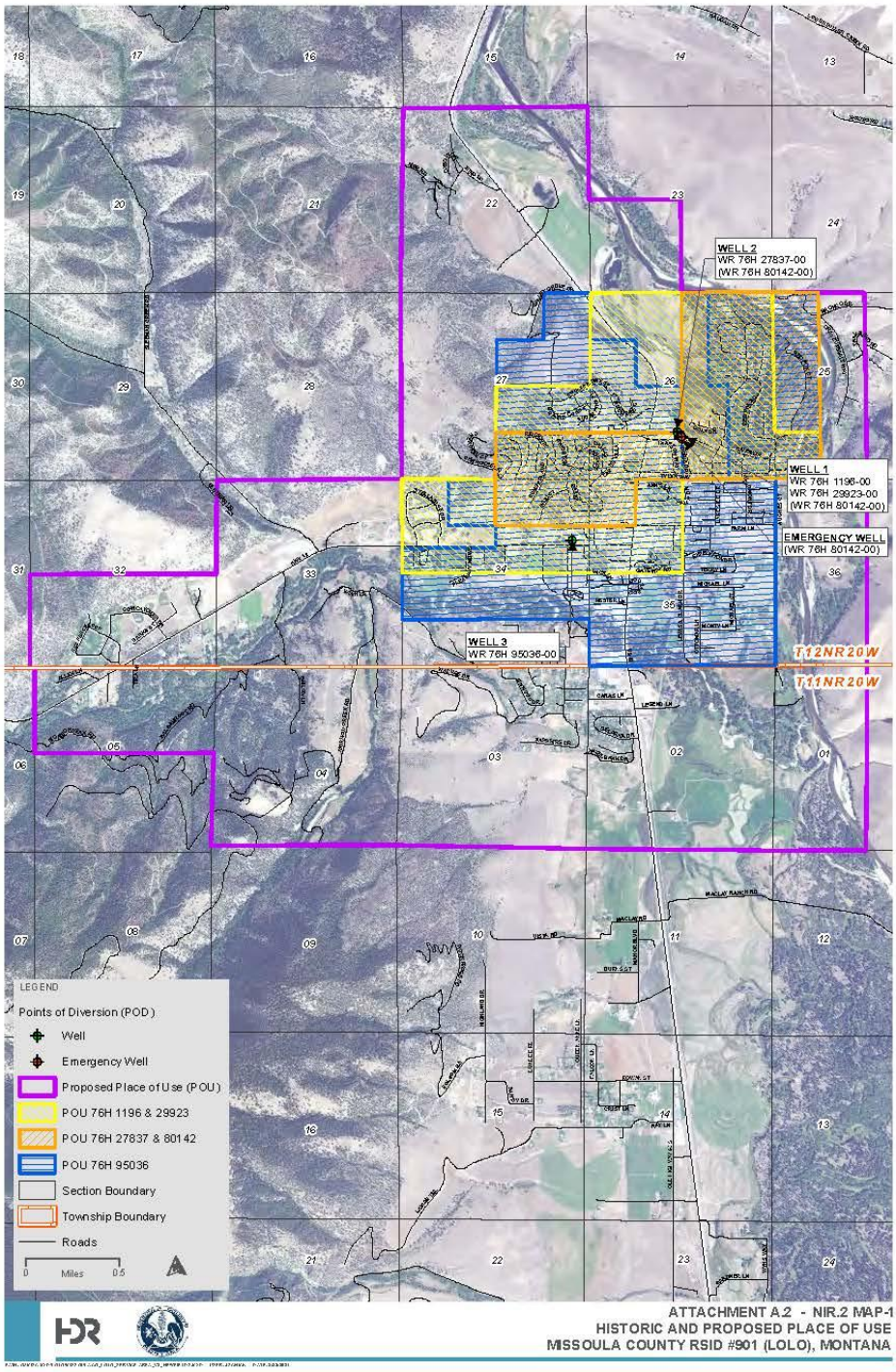
6. The Applicant does not propose to change the flow rate or volume of Certificate 76H 29923-00. Water will continue to be pumped within its respective issued flow rate and annual diverted volume of 75 GPM up to 61 AF from the Emergency Well.

7. The municipal water system is operated in compliance with Montana Department of Environmental Quality (DEQ) rules and regulations.

8. Map 1 shows the proposed elements of this application. This Change Authorization will be subject to the following condition to ensure no adverse effect pursuant to § 85-2-402 (2)(a), MCA.

THE APPROPRIATOR SHALL INSTALL A DEPARTMENT APPROVED IN-LINE FLOW METER AT A POINT IN THE DELIVERY LINE APPROVED BY THE DEPARTMENT. WATER MUST NOT BE DIVERTED UNTIL THE REQUIRED MEASURING DEVICE IS IN PLACE AND OPERATING. ON A FORM PROVIDED BY THE DEPARTMENT, THE APPROPRIATOR SHALL KEEP A WRITTEN RECORD OF THE FLOW RATE AND VOLUME OF ALL WATER DIVERTED, INCLUDING THE PERIOD OF TIME. RECORDS SHALL BE SUBMITTED BY JANUARY 31 OF EACH YEAR AND UPON REQUEST AT OTHER TIMES DURING THE YEAR. FAILURE TO SUBMIT REPORTS MAY BE CAUSE FOR REVOCATION OF A PERMIT OR CHANGE. THE RECORDS MUST BE SENT TO THE WATER RESOURCES REGIONAL OFFICE. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICE SO IT ALWAYS OPERATES PROPERLY AND MEASURES FLOW RATE AND VOLUME ACCURATELY.

Map 1


WELL 2
WR 76H 27837-00
(WR 76H 80142-00)
WELL 1
WR 76H 1196-00
WR 76H 29923-00
(WR 76H 80142-00)
EMERGENCY WELL
(WR 76H 80142-00)
WELL 3
WR 76H 95036-00
T12NR20W
T11NR20W
LEGEND
Points of Diversion (POD)
Well
Emergency Well
Proposed Place of Use (POU)
POU 76H 1196 & 29923
POU 76H 27837 & 80142
POU 76H 95036
Section Boundary
Township Boundary
Roads
0
Miles
0.5
ATTACHMENT A.2 - NIR.2 MAP-1
HISTORIC AND PROPOSED PLACE OF USE
MISSOULA COUNTY RSID #901 (LOLO), MONTANA

CHANGE CRITERIA

9. The Department is authorized to approve a change if the applicant meets its burden to prove the applicable § 85-2-402, MCA, criteria by a preponderance of the evidence. Matter of Royston, 249 Mont. 425, 429, 816 P.2d 1054, 1057 (1991); Hohenlohe v. DNRC, 2010 MT 203, ¶¶ 33, 35, and 75, 357 Mont. 438, 240 P.3d 628 (an applicant's burden to prove change criteria by a preponderance of evidence is "more probably than not."); Town of Manhattan v. DNRC, 2012 MT 81, ¶8, 364 Mont. 450, 276 P.3d 920. Under this Preliminary Determination, the relevant change criteria in §85-2-402(2), MCA, are:

> (2) Except as provided in subsections (4) through (6), (15), (16), and (18) and, if applicable, subject to subsection (17), the department shall approve a change in appropriation right if the appropriator proves by a preponderance of evidence that the following criteria are met:
> (a) The proposed change in appropriation right will not adversely affect the use of the existing water rights of other persons or other perfected or planned uses or developments for which a permit or certificate has been issued or for which a state water reservation has been issued under part 3.
> (b) The proposed means of diversion, construction, and operation of the appropriation works are adequate, except for: (i) a change in appropriation right for instream flow pursuant to 85-2-320 or 85-2-436; (ii) a temporary change in appropriation right for instream flow pursuant to 85-2-408; or (iii) a change in appropriation right pursuant to 85-2-420 for mitigation or marketing for mitigation.
> (c) The proposed use of water is a beneficial use.
> (d) The applicant has a possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use or, if the proposed change involves a point of diversion, conveyance, or place of use on national forest system lands, the applicant has any written special use authorization required by federal law to occupy, use, or traverse national forest system lands for the purpose of diversion, impoundment, storage, transportation, withdrawal, use, or distribution of water. This subsection (2)(d) does not apply to: (i) a change in appropriation right for instream flow pursuant to 85-2-320 or 85-2-436; (ii) a temporary change in appropriation right for instream flow pursuant to 85-2-408; or (iii) a change in appropriation right pursuant to 85-2-420 for mitigation or marketing for mitigation.

10. The evaluation of a proposed change in appropriation does not adjudicate the underlying right(s). The Department's change process only addresses the water right holder's ability to make a different use of that existing right. E.g., Hohenlohe, at ¶¶ 29-31; Town of Manhattan, at ¶8; *In the Matter of Application to Change Appropriation Water Right No.41F-31227 by T-L Irrigation Company* (DNRC Final Order 1991).

HISTORIC USE AND ADVERSE EFFECT

FINDINGS OF FACT - Historic Use

11. Certificate 76H 29923-00 was originally filed on March 10, 1980, and then a work copy of the form was created on November 29, 1989. It is unclear why the work copy was created nine years after the form was originally received, however the DNRC water right database lists a "Form Received" event on November 29, 1989. The Certificate of Water Right was issued on March 5, 1990. Per ARM 36.12.1902(1)(c) historic information for a certificate of water right must be described as it was used at the filing date of the Notice of Completion notice.

12. The Emergency Well (GWIC ID #167655) was drilled in 1969 and has a 6-inch diameter casing and is 87 feet deep with a test flow rate of 150 GPM. The well has a 5-horsepower submersible pump with a capacity of 75 GPM. It is used mainly for emergency and supplemental use for the lower part of the system. A pressure switch on a 315-gallon pressure tank controls the pump. During periods of low flow this well helps reduce the cycling of the pumps in the larger production Well Nos. 1 and 2.

13. On March 10, 1980, the Applicant filed a Statement of Claim (76H 1195-00) on the Emergency Well that claimed a flow rate of 220 GPM and a volume of 323 AF. Through the claims examination process the Applicant amended the claimed flow rate and volume down to 75 GPM and 61 AF to match actual use. The amendment was submitted on November 29, 1989, after DNRC conducted two interviews with Dave Haverfield, District Superintendent of Lolo RSID #901 from 1975 to 2007. The interviews were held on November 15, 1989, and November 29, 1989 and the Town of Lolo's water use from Well No. 1 (76H 1196-00) and the Emergency Well were discussed, with Mr. Haverfield presenting information to confirm the actual water use from these wells. Claim 76H 1195-00 was a duplicate filing of Certificate 76H 29923-00 and was listed in the Temporary Preliminary Decree for basin 76HA with a duplicate water right issue remark. This claim was withdrawn by the Applicant in Montana Water Court Case 76HB-32 to resolve the duplicate right issue, leaving Certificate 76H 29923-00 and Permit 76H 80142-00 the only active water rights for the Emergency Well. Per the information provided by Mr. Haverfield (see FOF No. 3), DNRC drafted a memo for the groundwater certificate file describing the use of the Emergency Well that states, "During summer months the well & pump are in use 24 hrs per day, however the rest of the year this well is used for a maximum of 12 hrs per day and as a back-up. So sometimes this system is not operated but for a few times per week. Estimated annual withdrawal rate is approximately 75 GPM up to 61 AF per annum".

14. Water pumped from the Emergency Well is comingled into a central water distribution system. This distribution system incorporates three above grade steel storage reservoirs, and a booster pumping station. The distribution system consists of 6-inch and 8-inch asbestos cement and poly-vinyl chloride piping dating back to 1969. A single mainline crossing the Montana Rail Link railroad tracks and Highway 93 carries water from Well Nos. 1 and 2 to the storage reservoirs. There are eight pressure zones with service elevations ranging from 3556 feet to 3146 feet above sea level. The water system is monitored and controlled via an ultra-high frequency radio system. The central telemetry unit is located at the wastewater treatment plant. Remote telemetry units exist at Reservoir No. 2 and the Booster Pumping Station. The Emergency Well is located near production Well No. 1. After water is pumped from the wells and distributed to end users throughout Lolo's municipal water system, wastewater is collected and treated in Lolo's Wastewater Treatment system, which discharges treated effluent to the Bitterroot River in the NE1/4 of Section 26, T12N, R20W.

15. Change Authorization 76H 119599, issued by the Department on December 9, 1991, included Certificate 76H 29923-00 being changed in this application, Claim 76H 1196-00, and Permit 76H 27837-00. The change authorization added a 500,000-gallon (1.5-AF) capacity, above ground, metal storage tank to the above listed water rights. During processing of this change application DNRC requested information related to the operation and use of Lolo's municipal water system wells and received a Water Operations Narrative dated January 23, 1990. This narrative described the past use of the Emergency Well. DNRC's approval of this change authorized the full 75 GPM flow rate and 61 AF diverted volume for Certificate 76H 29923-00.

16. The site layout of the Lolo Wastewater Treatment facility is illustrated in the diagrams submitted with the application as Attachments G.1 and G.4 (see File). Raw wastewater enters the treatment plant site from Lift Station No. 1 through a 6-inch force main to the Headworks channel. From the Headworks channel(s), the influent is directed to an Equalization Basin (80,000-gallon total volume, 40,000 gallon working volume) which is equipped with a floating aspirating-type aerator. From the Equalization Basin, the equalized flow is pumped continuously through the Control Building and Influent Pumps, and a magnetic influent flow meter, to the Aeration Tank. Wastewater travels from the Aeration Tank to the Secondary Clarifier, Ultraviolet Disinfection, Chlorine Contact Tank, and finally through a pipeline for effluent discharge to the Bitterroot River. Effluent flow to the river is measured using an ultrasonic open channel level transmitter and v-notch weir. There are five steps in the wastewater treatment where wastewater

is held or treated in ponds/basins that are open to atmospheric evaporation. These ponds/basins are listed below, along with their respective exposed surface areas.

1. Equalization Basin 0.1 acres
2. Aeration Basin/Aerator Tank 0.034 acres
3. Secondary Clarifier 0.036 acres
4. Aerobic Digester 0.31 acres
5. Sludge Storage Lagoon 1.1 acres

Total Open Water Surface 1.65 Acres

In 2020, approximately 83,879,000 gallons of treated effluent were discharged to the Bitterroot River.

17. The historic consumptive use volume for Certificate 76H 29923-00 is calculated as a percentage of the total diverted volume for the system. To calculate this percentage, the Department consulted water production and sewer records form 2020 provided by the Applicant. The 2020 well production and wastewater discharge data can be used to calculate historical use for this water right because the method of wastewater treatment has not changed since the water right was put to beneficial use in 1980.

18. The 2020 water production records show a total diverted volume for the system of 890.4 AF using all wells and water rights, including the one being changed in this application. The wastewater discharge records show 257.42 AF being discharged to the Bitterroot River after processing through the wastewater treatment facility. The volume of evaporation from the wastewater treatment facility ponds is 5.35 AF which is calculated as 1.65 surface acres for the ponds x 3.24 AF (the evaporation standard for the area) equaling 5.35 AF. The difference between water production and effluent discharge, plus evaporative losses, equals a consumptive use of 638.33 AF (890.4 AF – 257.42 AF + 5.35 AF = 638.33 AF). The percentage of all water diversions that is consumed in the system is calculated to be 71.69% (638.33 AF ÷ 890.4 AF = 71.69%). Multiplying this percentage by the 61 AF historic diverted volume for Certificate 76H 29923-00 yields a historic consumptive use of 43.73 AF (71.69% x 61 AF = 43.73 AF), which is rounded to 43.7 AF per ARM 36.12.1901(9).

19. Changes in place of use for Well No. 1 (76H 80142-00), Well No. 2 (76H-27837-00 & 76H 80142-00) and Well No. 3 (76H 95036-00) have all been proposed in separate pending change applications (FOF 3). The water rights are supplemental because they are all comingled into Lolo's water distribution system and have overlapping places of use.

20. The Department finds the following historic use for Certificate 76H 29223-00.

Table 4: Historical Use

Water Right Number	Flow Rate (GPM)	Diverted Volume (AF)	Consumed Volume	Period of Use	Place of Use	Point of Diversion	Priority Date
76H 29923-00	75 GPM	61 AF	43.7 AF	01/01 to 12/31	Sec. 26, 27, 34, 35 T12N, R20W	NESESW Sec 26, T12N, R20W	03/10/1980

FINDINGS OF FACT – Adverse Effect

21. Water right 76H 29923-00 will continue to be used within its issued flow rate of 75 GPM up to 61 AF of diverted volume.

22. The Emergency well currently does not have a flow rate or volumetric meter installed as it relies on a pressure switch to control use of the pump (FOF 12). If this proposed change in place of use is authorized, the Applicant will be required to record monthly water use from the Emergency Well and report measurements to the Department annually. The water measurement condition will ensure that the water rights flow rate and volume are not exceeded as a result of the proposed change in water use.

23. To prevent exceedance of the combined water rights for the system, the water system is monitored and controlled via an ultra-high frequency radio system. The central telemetry unit is located at the wastewater treatment plant. Remote telemetry units exist at Reservoir No. 2, the Booster Pumping Station, Well House No. 1 (Wells 1 and 2) and Well House No. 3. The average daily water production and peak daily demand for the year 2020 was 795,000 gallons, and 2,670,000 gallons respectively. For 2020, the total volume pumped from all three production wells and the emergency well combined was 890.4 AF.

24. The Department calculated historic consumptive use to be 43.7 AF (FOF 18). This application as granted will not result in an increase of flow rate or volume of water diverted as only the place of use is proposed to be changed, therefore the Department finds consumptive use will remain unchanged.

25. The proposed change in service area will not create an additional effect on water levels in neighboring wells outside of the effect of the original pumping when the Notice of Completion of Groundwater Development was originally issued in 1980. The Applicant's plan is to continue diverting water at the same flow rate and up to the same annual volume that were originally

authorized, and from the same well, and because only their place of use is changing, there will be no change in the rate or timing of net depletions from what was originally authorized.

26. The Applicant proposes to change the place of use for Certificate 76H 29923-00 with all of Lolo's water rights serving the municipal service area. This will create a homogenous place of use for the water rights serving Lolo's current population and projected growth. The existing wells are manifold into one central supply system, with water from each well and water right being comingled and delivered to a common place of use. The current service area (place of use) for Certificate 76H 29923-00 consists of an area that is approximately 2,200 acres, and the proposed place of use will consist of 7,520 acres. The existing service area for the water right being changed comprises an area that is approximately 2,200 acres within Sections 26, 27, 34 and 35, all in T12N, R20W, Missoula County. The proposed service area that will be supplied water by all the Lolo municipal water rights comprises an area approximately 7,520 acres in size, within the sections shown in Table 5 below.

Table 5 – Legal Land Description of proposed Place of Use

	Section	**Township**	**Range**
ALL	22	12 N	20 W
SW ¼	23	12 N	20 W
W ½	25	12 N	20 W
ALL	26	12 N	20 W
ALL	27	12 N	20 W
S ½	32	12 N	20 W
ALL	33	12 N	20 W
ALL	34	12 N	20 W
ALL	35	12 N	20 W
W ½	36	12 N	20 W
W ½	01	11 N	20 W
ALL	02	11 N	20 W
ALL	03	11 N	20 W
ALL	04	11 N	20 W
N ½	05	11 N	20 W

27. The Department finds there will be no adverse effect to other water users resulting from the proposed change in place of use under the terms and conditions set forth in this Preliminary Determination.

BENEFICIAL USE

FINDINGS OF FACT

28. The Applicant proposes to continue to use Certificate No. 76H 29923-00 for the purpose of municipal use. This purpose is recognized by the Department as a beneficial use. According to Lolo's Water Rights Future Needs Assessment, Lolo's future water needs for municipal water supply is estimated to reach 5,485.9 AF/YR by 2070. Lolo's five municipal water rights (76H 1196-00, 76H 27837-00, 76H 29923-00, 76H 80142-00 and 76H 95036-00) added together have a total authorized flow rate of 3,987 GPM (8.88 CFS) and volume of 6,090.9 AF/YR, of which Certificate 76H 29923-00 may provide 75 GPM up to 61 AF per year.

29. The Applicant proposes to continue using the authorized 61 AF diverted volume and 75-GPM flow rate. This application will not result in an increase of flow or volume. Flow rate and volume limits have already been established as reasonable through the previous DNRC certificate process.

30. The Department finds the post-change appropriation of the issued volume of Certificate 76H 29223-00 for municipal purposes in the Town of Lolo to be a beneficial use of water.

ADEQUATE DIVERSION

FINDINGS OF FACT

31. The well location, depth, and pump installed in the Emergency Well will not be changed as a result of this application as granted. Areas within the proposed post-change place of use that do not currently have the infrastructure in place to provide water will be developed based on Montana DEQ rules. An overall schematic of the current water system including water mains and a map showing the proposed change in place of use, is included in the original application materials submitted by the Applicant. The current place of use for this water right consists of 2,200 acres, and the proposed place of use that will be reflected on all of Lolo's municipal water rights will consist of 7,520 acres.

32. The Department finds the means of diversion, construction, and operation of the appropriation works are adequate for the beneficial use. The means of diversion has been in existence for decades and has already been established as reasonable through the previous DNRC certificate issuance process.

POSSESSORY INTEREST

FINDINGS OF FACT

33. This application is for instream flow, sale, rental, distribution, or is a municipal use application in which water is supplied to another. It is clear that the ultimate user will not accept the supply without consenting to the use of water. ARM 36.12.1802. The Applicant has possessory interest in the property where the water is to be put to beneficial use or has the written consent of the person having the possessory interest.

CONCLUSIONS OF LAW

HISTORIC USE AND ADVERSE EFFECT

34. Montana's change statute codifies the fundamental principles of the Prior Appropriation Doctrine. Sections 85-2-401 and -402(1)(a), MCA, authorize changes to existing water rights, permits, and water reservations subject to the fundamental tenet of Montana water law that one may change only that to which he or she has the right based upon beneficial use. A change to an existing water right may not expand the consumptive use of the underlying right or remove the well-established limit of the appropriator's right to water actually taken and beneficially used. An increase in consumptive use constitutes a new appropriation and is subject to the new water use permit requirements of the MWUA. McDonald v. State, 220 Mont. 519, 530, 722 P.2d 598, 605 (1986)(beneficial use constitutes the basis, measure, and limit of a water right); Featherman v. Hennessy, 43 Mont. 310, 316-17, 115 P. 983, 986 (1911)(increased consumption associated with expanded use of underlying right amounted to new appropriation rather than change in use); Quigley v. McIntosh, 110 Mont. 495, 103 P.2d 1067, 1072-74 (1940)(appropriator may not expand a water right through the guise of a change – expanded use constitutes a new use with a new priority date junior to intervening water uses); Allen v. Petrick, 69 Mont. 373, 222 P. 451(1924)("quantity of water which may be claimed lawfully under a prior appropriation is limited to that quantity within the amount claimed which the appropriator has needed, and which within a reasonable time he has actually and economically applied to a beneficial use. . . . it may be said that the principle of beneficial use is the one of paramount importance . . . The appropriator does not own the water. He has a right of ownership in its use only"); Town of Manhattan, at ¶ 10 (an appropriator's right only attaches to the amount of water actually taken and beneficially applied); Town of Manhattan v. DNRC, Cause No. DV-09-872C, Montana Eighteenth Judicial District Court, *Order Re Petition for Judicial Review,* Pg. 9 (2011)(the rule that one may change only that to

which it has a right is a fundamental tenet of Montana water law and imperative to MWUA change provisions); In the Matter of Application to Change a Water Right No. 41I 30002512 by Brewer Land Co, LLC, DNRC Proposal For Decision and Final Order (2004).[1]

35. Sections 85-2-401(1) and -402(2)(a), MCA, codify the prior appropriation principles that Montana appropriators have a vested right to maintain surface and ground water conditions substantially as they existed at the time of their appropriation; subsequent appropriators may insist that prior appropriators confine their use to what was actually appropriated or necessary for their originally intended purpose of use; and, an appropriator may not change or alter its use in a manner that adversely affects another water user. Spokane Ranch & Water Co. v. Beatty, 37 Mont. 342, 96 P. 727, 731 (1908); Quigley, 110 Mont. at 505-11,103 P.2d at 1072-74; Matter of Royston, 249 Mont. at 429, 816 P.2d at 1057; Hohenlohe, at ¶¶43-45.[2]

36. The cornerstone of evaluating potential adverse effect to other appropriators is the determination of the "historic use" of the water right being changed. Town of Manhattan, at ¶10 (recognizing that the Department's obligation to ensure that change will not adversely affect other water rights requires analysis of the actual historic amount, pattern, and means of water use). A change applicant must prove the extent and pattern of use for the underlying right proposed for change through evidence of the historic diverted amount, consumed amount, place of use, pattern of use, and return flow because a statement of claim, permit, or decree may not include the beneficial use information necessary to evaluate the amount of water available for change or potential for adverse effect.[3] A comparative analysis of the historic use of the water right to the proposed change in use is necessary to prove the change will not result in expansion of the original right, or adversely affect water users who are entitled to rely upon maintenance of

[1] DNRC decisions are available at:
http://www.dnrc.mt.gov/wrd/water_rts/hearing_info/hearing_orders/hearingorders.asp

[2] See also Holmstrom Land Co., Inc., v. Newlan Creek Water District,185 Mont. 409, 605 P.2d 1060 (1979); Lokowich v. Helena, 46 Mont. 575, 129 P. 1063(1913); Thompson v. Harvey, 164 Mont. 133, 519 P.2d 963 (1974)(plaintiff could not change his diversion to a point upstream of the defendants because of the injury resulting to the defendants); McIntosh v. Graveley, 159 Mont. 72, 495 P.2d 186 (1972)(appropriator was entitled to move his point of diversion downstream, so long as he installed measuring devices to ensure that he took no more than would have been available at his original point of diversion); Head v. Hale, 38 Mont. 302, 100 P. 222 (1909)(successors of the appropriator of water appropriated for placer mining purposes cannot so change its use as to deprive lower appropriators of their rights, already acquired, in the use of it for irrigating purposes); and, Gassert v. Noyes, 18 Mont. 216, 44 P. 959(1896)(change in place of use was unlawful where reduced the amount of water in the source of supply available which was subject to plaintiff's subsequent right).

[3] A claim only constitutes *prima facie* evidence for the purposes of the adjudication under § 85-2-221, MCA. The claim does not constitute *prima facie* evidence of historical use in a change proceeding under §85-2-402, MCA. For example, most water rights decreed for irrigation are not decreed with a volume and provide limited evidence of actual historic beneficial use. §85-2-234, MCA

conditions on the source of supply for their water rights. Quigley, 103 P.2d at 1072-75 (it is necessary to ascertain historic use of a decreed water right to determine whether a change in use expands the underlying right to the detriment of other water user because a decree only provides a limited description of the right); Royston, 249 Mont. at 431-32, 816 P.2d at 1059-60 (record could not sustain a conclusion of no adverse effect because the applicant failed to provide the Department with evidence of the historic diverted volume, consumption, and return flow); Hohenlohe, at ¶44-45; Town of Manhattan v. DNRC, Cause No. DV-09-872C, Montana Eighteenth Judicial District Court, *Order Re Petition for Judicial Review,* Pgs. 11-12 (proof of historic use is required even when the right has been decreed because the decreed flow rate or volume establishes the maximum appropriation that may be diverted, and may exceed the historical pattern of use, amount diverted or amount consumed through actual use); Matter of Application For Beneficial Water Use Permit By City of Bozeman, *Memorandum*, Pgs. 8-22 (Adopted by DNRC *Final Order* January 9,1985)(evidence of historic use must be compared to the proposed change in use to give effect to the implied limitations read into every decreed right that an appropriator has no right to expand his appropriation or change his use to the detriment of juniors).[4]

37. An applicant must also analyze the extent to which a proposed change may alter historic return flows for purposes of establishing that the proposed change will not result in adverse effect.

[4] Other western states likewise rely upon the doctrine of historic use as a critical component in evaluating changes in appropriation rights for expansion and adverse effect: Pueblo West Metropolitan District v. Southeastern Colorado Water Conservancy District, 717 P.2d 955, 959 (Colo. 1986)("[O]nce an appropriator exercises his or her privilege to change a water right … the appropriator runs a real risk of requantification of the water right based on actual historical consumptive use. In such a change proceeding a junior water right … which had been strictly administered throughout its existence would, in all probability, be reduced to a lesser quantity because of the relatively limited actual historic use of the right."); Santa Fe Trail Ranches Property Owners Ass'n v. Simpson, 990 P.2d 46, 55 -57 (Colo.,1999); Farmers Reservoir and Irr. Co. v. City of Golden, 44 P.3d 241, 245 (Colo. 2002)("We [Colorado Supreme Court] have stated time and again that the need for security and predictability in the prior appropriation system dictates that holders of vested water rights are entitled to the continuation of stream conditions as they existed at the time they first made their appropriation); Application for Water Rights in Rio Grande County, 53 P.3d 1165, 1170 (Colo. 2002); Wyo. Stat. § 41-3-104 (When an owner of a water right wishes to change a water right … he shall file a petition requesting permission to make such a change …. The change … may be allowed provided that the quantity of water transferred … shall not exceed the amount of water historically diverted under the existing use, nor increase the historic rate of diversion under the existing use, nor increase the historic amount consumptively used under the existing use, nor decrease the historic amount of return flow, nor in any manner injure other existing lawful appropriators.); Basin Elec. Power Co-op. v. State Bd. of Control, 578 P.2d 557, 564 -566 (Wyo,1978) (a water right holder may not effect a change of use transferring more water than he had historically consumptively used; regardless of the lack of injury to other appropriators, the amount of water historically diverted under the existing use, the historic rate of diversion under the existing use, the historic amount consumptively used under the existing use, and the historic amount of return flow must be considered.)

The requisite return flow analysis reflects the fundamental tenant of Montana water law that once water leaves the control of the original appropriator, the original appropriator has no right to its use and the water is subject to appropriation by others. E.g., Hohenlohe, at ¶44; Rock Creek Ditch & Flume Co. v. Miller, 93 Mont. 248, 17 P.2d 1074, 1077 (1933); Newton v. Weiler, 87 Mont. 164, 286 P. 133(1930); Popham v. Holloron, 84 Mont. 442, 275 P. 1099, 1102 (1929); Galiger v. McNulty, 80 Mont. 339, 260 P. 401 (1927); Head v. Hale, 38 Mont. 302, 100 P. 222 (1909); Spokane Ranch & Water Co., 37 Mont. at 351-52, 96 P. at 731; Hidden Hollow Ranch v. Fields, 2004 MT 153, 321 Mont. 505, 92 P.3d 1185; In the Matter of Application for Change Authorization No. G (W)028708-411 by Hedrich/Straugh/Ringer, DNRC Final Order (Dec. 13, 1991); In the Matter of Application for Change Authorization No. G(W)008323-G76l By Starkel/Koester, DNRC Final Order (Apr. 1, 1992); In the Matter of Application to Change a Water Right No. 41I 30002512 by Brewer Land Co, LLC, DNRC Proposal For Decision and Final Order (2004); ARM 36.12.101(56)(Return flow - that part of a diverted flow which is not consumed by the appropriator and returns underground to its original source or another source of water - is not part of a water right and is subject to appropriation by subsequent water users).[5]

38. Although the level of analysis may vary, analysis of the extent to which a proposed change may alter the amount, location, or timing return flows is critical in order to prove that the proposed change will not adversely affect other appropriators who rely on those return flows as part of the source of supply for their water rights. Royston, 249 Mont. at 431, 816 P.2d at 1059-60; Hohenlohe, at ¶¶ 45-6 and 55-6; Spokane Ranch & Water Co., 37 Mont. at 351-52, 96 P. at 731. Noted Montana Water Law scholar Al Stone explained that the water right holder who seeks to change a water right is unlikely to receive the full amount claimed or historically used at the original place of use due to reliance upon return flows by other water users. Montana Water Law, Albert W. Stone, Pgs. 112-17 (State Bar of Montana 1994).

39. In Royston, the Montana Supreme Court confirmed that an applicant is required to prove lack of adverse effect through comparison of the proposed change to the historic use, historic consumption, and historic return flows of the original right. 249 Mont. at 431, 816 P.2d at 1059-60. More recently, the Montana Supreme Court explained the relationship between the

[5] The Montana Supreme Court recently recognized the fundamental nature of return flows to Montana's water sources in addressing whether the Mitchell Slough was a perennial flowing stream, given the large amount of irrigation return flow which feeds the stream. The Court acknowledged that the Mitchell's flows are fed by irrigation return flows available for appropriation. Bitterroot River Protective Ass'n, Inc. v. Bitterroot Conservation Dist. 2008 MT 377, ¶¶ 22, 31, 43, 346 Mont. 508, ¶¶ 22, 31,43, 198 P.3d 219, ¶¶ 22, 31,43(*citing* Hidden Hollow Ranch v. Fields, 2004 MT 153, 321 Mont. 505, 92 P.3d 1185).

fundamental principles of historic beneficial use, return flow, and the rights of subsequent appropriators as they relate to the adverse effect analysis in a change proceeding in the following manner:

> The question of adverse effect under §§ 85-2-402(2) and -408(3), MCA, implicates return flows. A change in the amount of return flow, or to the hydrogeologic pattern of return flow, has the potential to affect adversely downstream water rights. There consequently exists an inextricable link between the "amount historically consumed" and the water that re-enters the stream as return flow. . . .
> An appropriator historically has been entitled to the greatest quantity of water he can put to use. The requirement that the use be both beneficial and reasonable, however, proscribes this tenet. This limitation springs from a fundamental tenet of western water law-that an appropriator has a right only to that amount of water historically put to beneficial use-developed in concert with the rationale that each subsequent appropriator "is entitled to have the water flow in the same manner as when he located," and the appropriator may insist that prior appropriators do not affect adversely his rights.
> This fundamental rule of Montana water law has dictated the Department's determinations in numerous prior change proceedings. The Department claims that historic consumptive use, as quantified in part by return flow analysis, represents a key element of proving historic beneficial use.
> We do not dispute this interrelationship between historic consumptive use, return flow, and the amount of water to which an appropriator is entitled as limited by his past beneficial use.

Hohenlohe, at ¶¶ 42-45 (internal citations omitted).

40. The Department's rules reflect the above fundamental principles of Montana water law and are designed to itemize the type evidence and analysis required for an applicant to meet its burden of proof. ARM 36.12.1901 through 1903. These rules forth specific evidence and analysis required to establish the parameters of historic use of the water right being changed. ARM 36.12.1901 and 1902. The rules also outline the analysis required to establish a lack of adverse effect based upon a comparison of historic use of the water rights being changed to the proposed use under the changed conditions along with evaluation of the potential impacts of the change on other water users caused by changes in the amount, timing, or location of historic diversions and return flows. ARM 36.12.1901 and 1903.

41. The Applicant has proven by a preponderance of the evidence that Certificate No. 76H 29923-00 can be changed and that the change of place of use will not increase the 75 GPM flow rate or 61AF of diverted volume. (FOF Nos. 11-20)

42. The Applicant has proven that the proposed change in appropriation right will not adversely affect the use of the existing water rights of other persons or other perfected or planned uses or developments for which a permit or certificate has been issued or for which a state water reservation has been issued. § 85-2-402(2)(b), MCA. (FOF Nos. 21-27)

BENEFICIAL USE

43. A change applicant must prove by a preponderance of the evidence the proposed use is a beneficial use. §§ 85-2-102(4) and -402(2)(c), MCA. Beneficial use is and has always been the hallmark of a valid Montana water right: "[T]he amount actually needed for beneficial use within the appropriation will be the basis, measure, and the limit of all water rights in Montana . . ." McDonald, 220 Mont. at 532, 722 P.2d at 606. The analysis of the beneficial use criterion is the same for change authorizations under §85-2-402, MCA, and new beneficial permits under § 85-2-311, MCA. ARM 36.12.1801. The amount of water that may be authorized for change is limited to the amount of water necessary to sustain the beneficial use. E.g., Bitterroot River Protective Association v. Siebel*, Order on Petition for Judicial Review*, Cause No. BDV-2002-519, Montana First Judicial District Court (2003) (*affirmed on other grounds*, 2005 MT 60, 326 Mont. 241, 108 P.3d 518); Worden v. Alexander, 108 Mont. 208, 90 P.2d 160 (1939); Allen v. Petrick, 69 Mont. 373, 222 P. 451(1924); Sitz Ranch v. DNRC, DV-10-13390, Montana Fifth Judicial District Court, *Order Affirming DNRC Decision*, Pg. 3 (2011)(citing BRPA v. Siebel, 2005 MT 60, and rejecting applicant's argument that it be allowed to appropriate 800 acre-feet when a typical year would require 200-300 acre-feet); Toohey v. Campbell, 24 Mont. 13, 60 P. 396 (1900)("The policy of the law is to prevent a person from acquiring exclusive control of a stream, or any part thereof, not for present and actual beneficial use, but for mere future speculative profit or advantage, without regard to existing or contemplated beneficial uses. He is restricted in the amount that he can appropriate to the quantity needed for such beneficial purposes."); § 85-2-312(1)(a), MCA (DNRC is statutorily prohibited from issuing a permit for more water than can be beneficially used).

44. The Department may issue a change authorization for less than the amount of water requested, but may not issue a change authorization for more water than is requested or more water than can be beneficially used without waste for the purpose stated in the application. § 85-2-312, MCA; see also, McDonald v. State, 220 Mont. 519, 722 P.2d 598 (1986); Toohey v. Campbell, 24 Mont. 13, 60 P. 396 (1900).

45. The Department can also consider waste in a change proceeding. Hohenlohe at ¶ 71. Waste is defined to include the "application of water to anything but a beneficial use." § 85-2-102(23), MCA. An absence of evidence of waste does not prove the amount requested is for a beneficial use. E.g., *Stellick*, supra.

46. Applicant proposes to use water for municipal use which is a recognized beneficial use. § 85-2-102(5), MCA. Applicant has proven by a preponderance of the evidence municipal is a beneficial use and that a flow rate of 75 GPM and 61 AF of diverted volume of water requested is the amount needed to sustain the beneficial § 85-2-402(2)(c), MCA (FOF Nos. 28- 30)

ADEQUATE MEANS OF DIVERSION

47. Pursuant to § 85-2-402 (2)(b), MCA, the Applicant must prove by a preponderance of the evidence that the proposed means of diversion, construction, and operation of the appropriation works are adequate. This codifies the prior appropriation principle that the means of diversion must be reasonably effective for the contemplated use and may not result in a waste of the resource. Crowley v. 6th Judicial District Court, 108 Mont. 89, 88 P.2d 23 (1939); In the Matter of Application for Beneficial Water Use Permit No. 41C-11339900 by Three Creeks Ranch of Wyoming LLC (DNRC Final Order 2002)(information needed to prove that proposed means of diversion, construction, and operation of the appropriation works are adequate varies based upon project complexity; design by licensed engineer adequate).

48. Pursuant to § 85-2-402 (2)(b), MCA, applicant has proven by a preponderance of the evidence that the proposed means of diversion, construction, and operation of the appropriation works are adequate for the proposed beneficial use. (FOF Nos. 31, 32)

POSSESSORY INTEREST

49. Pursuant to § 85-2-402(2)(d), MCA, the Applicant must prove by a preponderance of the evidence that it has a possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use. See also ARM 36.12.1802

50. The Applicant has proven by a preponderance of the evidence that it has a possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use. (FOF No. 33)

PRELIMINARY DETERMINATION

Subject to the terms and analysis in this Preliminary Determination Order, the Department preliminarily determines that this Application to Change Water Right No. 76H 30155255 should be granted subject to the following.

The Department determines the Applicant may change the place of use of Groundwater Certificate No. 76H 29923-00 to accommodate the anticipated future municipal growth of the Town of Lolo through planning year 2070. The point of diversion at the Emergency Well, flow rate, and amount of water diverted will remain unchanged. The place of use shall be changed from an area encompassing 2,200 acres to an area encompassing approximately 7,520 acres within the sections shown in the table below.

Legal Land Description of Proposed Place of Use

	Section	Township	Range
ALL	22	12 N	20 W
SW ¼	23	12 N	20 W
W ½	25	12 N	20 W
ALL	26	12 N	20 W
ALL	27	12 N	20 W
S ½	32	12 N	20 W
ALL	33	12 N	20 W
ALL	34	12 N	20 W
ALL	35	12 N	20 W
W ½	36	12 N	20 W
W ½	01	11 N	20 W
ALL	02	11 N	20 W
ALL	03	11 N	20 W
ALL	04	11 N	20 W
N ½	05	11 N	20 W

This change will be subject to the following water measurement condition:

THE APPROPRIATOR SHALL INSTALL A DEPARTMENT APPROVED IN-LINE FLOW METER AT A POINT IN THE DELIVERY LINE APPROVED BY THE DEPARTMENT. WATER MUST NOT BE DIVERTED UNTIL THE REQUIRED MEASURING DEVICE IS IN PLACE AND OPERATING. ON A FORM PROVIDED BY THE DEPARTMENT, THE APPROPRIATOR SHALL KEEP A WRITTEN RECORD OF THE FLOW RATE AND VOLUME OF ALL WATER DIVERTED, INCLUDING THE PERIOD OF TIME. RECORDS SHALL BE SUBMITTED BY JANUARY 31 OF EACH YEAR AND UPON REQUEST AT OTHER TIMES DURING THE YEAR. FAILURE TO SUBMIT REPORTS MAY BE CAUSE FOR REVOCATION OF A PERMIT OR CHANGE. THE RECORDS MUST BE SENT TO THE WATER RESOURCES REGIONAL OFFICE. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICE SO IT ALWAYS OPERATES PROPERLY AND MEASURES FLOW RATE AND VOLUME ACCURATELY.

NOTICE

This Department will provide public notice of this Application and the Department's Preliminary Determination to Grant pursuant to § 85-2-307, MCA. The Department will set a deadline for objections to this Application pursuant to §§ 85-2-307, and -308, MCA. If this Application receives a valid objection, it will proceed to a contested case proceeding pursuant to Title 2 Chapter 4 Part 6, MCA, and § 85-2-309, MCA. If this Application receives no valid objection or all valid objections are unconditionally withdrawn, the Department will grant this Application as herein approved. If this Application receives a valid objection(s) and the valid objection(s) are conditionally withdrawn, the Department will consider the proposed condition(s) and grant the Application with such conditions as the Department decides necessary to satisfy the applicable criteria. E.g., §§ 85-2-310, -312, MCA.

DATED this 17th day of January 2023.

/Original signed by Jim Nave/
Jim Nave, Manager
Missoula Regional Office
Department of Natural Resources
and Conservation

CERTIFICATE OF SERVICE

This certifies that a true and correct copy of the PRELIMINARY DETERMINATION TO GRANT was served upon all parties listed below on this 17th day of January 2023, by first class United States mail.

MILLER LAW, PLLC
401 WASHINGTON ST.
MISSOULA, MT 59802

/Original signed by Kathy Schubert/
Kathy Schubert, (406) 542-5892